

Memo to file (Culdesac, ID) 309a compliance order

During settlement discussions with the City of Culdesac, ID, the following issue came to my attention:

Upon a review of the compliance and permitting history of small municipal wastewater treatment facilities in Idaho, EPA determined that a compliance evaluation level of 0.1 mg/l is typically included in permits that set forth new water quality-based effluent limits for total residual chlorine (TRC) that are not quantifiable using EPA approved analytical methods (e.g. Craigmont, ID; Troy, ID; Wilder, ID...). Similarly, as specified in the NPDES permit for the City, the “permittee will be in compliance with the effluent limits provided the total chlorine residual is at or below the compliance evaluation level of 0.100 mg/L (100 µg/l)”. See Footnote 7, Table 1, Part I.B of the permit. However, unlike the other NPDES permits for the small municipalities, a corresponding loading limit (lbs/day) based upon the 0.1 mg/l was not included in the City’s permit. The current loading limits of 0.0041 and 0.0082 lbs/day are based on the water quality based effluent limits of 0.009 and 0.017 mg/l, respectively, instead of the compliance evaluation level of 0.1 mg/l. If the loading limits were calculated in a manner consistent with the other small municipal permits, then the corresponding daily maximum and monthly average loading limits would both be 0.046 lbs/day. The limits would be 11.2 and 5.6 times higher than the current loading limits in the permit. In addition, the most recent DMRs from the City (June 2011 and July 2011) indicate that the City would not have violated these limits given the corresponding compliance evaluation level of 0.046 lbs/day.

Given the current EPA approved methods and applicable detection limits for total residual chlorine, the only way the City could meet the current loading limits is to decrease their daily flow ten-fold (i.e. decrease to < 0.005 million gallons per day or MGD). This decrease is highly unlikely and very problematic given the current design of the City’s wastewater treatment facility (i.e. a lagoon system with a design flow of 0.055 MGD).

Taking all of this information into account, there is a risk that this information may arise during any future administrative hearings. Therefore, EPA feels that a compliance order is necessary to set forth interim effluent loading limits (i.e. 0.046 lbs/day) that are consistent with other NPDES permits for small municipalities in Idaho. The order would provide the time necessary for the City to come into compliance with the water quality-based effluent limits (e.g. a change in management practices, new EPA approved methods with lower detection limits and/or reissuance of the NPDES permit with loading limits consistent with other NPDES permits).